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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,108	10/23/2003	Lajos Reich	135937	6578

7590 05/04/2005

Timothy E. Nauman  
FAY, SHARPE, FAGAN, MINNICH & McKEE, LLP  
7th Floor  
1100 Superior Avenue  
Cleveland, OH 44114

EXAMINER

PATEL, VIP

ART UNIT	PAPER NUMBER
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2879

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/692,108	<b>Applicant(s)</b> REICH ET AL.	
	<b>Examiner</b> Vip Patel	<b>Art Unit</b> 2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 30 is/are allowed.
- 6) ☒ Claim(s) 24-29 is/are rejected.
- 7) ☒ Claim(s) 1-23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>0205</u> . | 6) <input type="checkbox"/> Other: ____.  |

### **Claim Objections**

Claims 1-23 are objected to because of the following reason.

In line 5 of claim 1, applicant claims "a first set of interconnected electrodes and second set of interconnected electrodes". In line 6 of claim 1, applicant claims "the electrodes" being isolated from the discharge volume. In line 6 of claim 1, "the electrodes" should be corrected to read as ---the first and second set of electrodes--- since applicant, from reading specification and claim 30, mean all electrodes are isolated from the discharge volume. A similar situation also appears in claim 22. Dependent claims are included in the objection since they depend on objected independent claims. Appropriate correction is required.

### **Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 24-25 and 27 are rejected under 35 U.S.C. § 102(b) as being anticipated by Fohl et al (EP 000296535 A2, pub date: 12-28-88).

Regarding claim 24, Fohl discloses a discharge vessel (see figure 1) enclosing a sealed discharge volume of discharge gas (lines 32-35 of column 5) comprising an outer tubular portion (where reference elements 10 and 28 are pointing in figure 1) having an internal surface (34) and an inner tubular portion (two walls connecting at reference element 32 of figure 1) having an outward surface (not labeled but seen in figure 1; surface on which phosphor layer 26 is deposited). The outer tubular portion surrounds the inner tubular portion and the discharge volume/gas is enclosed between the internal surface and the outward surface.

Regarding claim 25, the outer tubular portion and the inner tubular portion of Fohl's discharge vessel are concentric with each other (see figure 1).

Regarding claim 27, the discharge vessel of Fohl has a phosphor layer (26 of figure 1) within the sealed discharge volume.

### **Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 26 and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fohl et al (EP 000296535 A2, pub date: 12-28-88) and Grossman (US 5294867).

Regarding claims 28-29, Fohl discloses all the limitations of claims 28-29 except an exhaust tube and its specific location.

First, the limitations of exhaust tube and its location are not deemed patentable since the applicant's disclosure fails to show such limitations to solve any problems or to yield any unobvious advantage that is not within the scope of the teachings applied. Therefore, such limitations would be a matter of design alternative.

Secondly, as cited above, Fohl's vessel is filled with discharge volume of discharge gas. Therefore, during the manufacturing process of Fohl's vessel, there inherently was an exhaust tube or exhaust hole in order to fill the vessel the discharge gas. As to the specific location of the exhaust tube, it is a matter of design alternative so long as it served the identical purpose filling the vessel.

Thirdly, in the same field of endeavor, Grossman discloses such an exhaust tube (45, 46 of figure 1) along central axis for the purpose of filling a vessel. Thus, it would have been obvious, at the time the invention was made, to a person having ordinary skill in the art to provide an exhaust tube as taught by Grossman for evacuating and filling Fohl's vessel with suitable fill.

Regarding claim 26, the limitations of specific distance between the internal surface and the outward surface is not deemed patentable since the applicant's disclosure fails to show such limitations to solve any problems or to yield any unobvious advantage that is not within the scope of the teachings applied. Therefore, such limitations would be a matter of design alternative. Alternatively, the above distance define how wide an inner space where gas discharge is filled. The vessels of Fohl and Grossman evidently have a specific distance (even though not specifically cited) between two walls. Suitable distance, falling with the claimed parameters, for which a vessel operates at maximum proficiency may very well be obtained by performing routine experimentation.

#### **Allowable Subject Matter**

Claims 1-23 and 30 are allowable since the prior art of record does not teach the claimed dielectric barrier discharge lamp comprising first and second set of interconnected electrodes, located external to a discharge vessel, being isolated from a discharge volume by at least one dielectric layer that is a wall of the discharge vessel in combination with other features of independent claim.

#### **Other Prior Art Cited**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

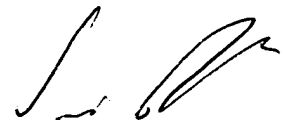
Miyazaki et al, in US 6522084, disclose an electrodeless discharge lamp operating apparatus.

Dullea et al, in US 4530710, disclose a low-pressure arc discharge lamp having a parallel discharge tubes.

### **Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vip Patel whose telephone number is (571) 272-2458. The examiner can normally be reached on Monday-Thursday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh D Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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